

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: Babar Sarwar : PATENT APPLICATION

In re application of: :

**Reinhold Braam et al.**

Serial No.: 10/580,337 : **METHOD FOR ESTABLISHING A**

Filed: May 23, 2006 : **CONNECTION BETWEEN A SERVICE**

Group Art Unit: 2617 : **REQUESTER (CLIENT) AND A SERVICE**

Confirmation No.: 3216 : **PROVIDER (SERVER) IN A**

: **DECENTRALIZED MOBILE WIRELESS**

: **NETWORK**

**REPLY BRIEF**

Ralph G. Fischer  
Registration No. 55,179  
BUCHANAN INGERSOLL & ROONEY PC  
One Oxford Centre  
301 Grant Street  
Pittsburgh, Pennsylvania 15219  
Attorney for Applicants

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In response to the Examiner's Answer mailed on March 24, 2011, Applicants hereby submit the following reply:

**I. The Examiner Impermissibly Relies On Duggi et al.**

In the Examiner's Answer, the Examiner again relies on new matter not present in the provisional application to which the Duggi reference claims priority, U.S. Provisional Patent Application No. 60/497,274 (hereafter referred to as "Duggi's provisional application or "Duggi's provisional patent application"). For example, the Examiner cited paragraphs 17 and 48-50 of the Duggi published patent application, even though these portions of text are not present in nor supported by Duggi's provisional patent application. (*See e.g.* Examiner's Answer, at 14)

The Examiner, however, contends that his reliance on this new matter is "irrelevant". *See* Examiner's Answer, at 21. The Examiner contends that page 1, paragraphs 1-3 of Duggi's provisional patent application teaches "all necessary steps of the invention." *Id.* To the contrary, the Examiner has not relied on these sections of the Duggi provisional patent application to reject the pending claims in the Office Action, he has relied on paragraphs of the U.S. published patent application that are not found in the provisional application, nor are they supported by the provisional application.

**A. The Duggi Provisional Application Does Not Teach "All Necessary Steps Of The Invention"**

The Duggi provisional patent application includes one page of substantive text. This one page does not provide sufficient disclosure to discuss all necessary steps of the invention as claimed at page 21 of the Examiner's Answer. To the contrary, Duggi's provisional patent application merely discusses a source sending a message to new router and receiving a reply from that router. (Duggi Provisional Patent Application, at ¶¶ 1-3). There is no disclosure of a

service requester device requesting service via a message sent to a number of routers, nor any service provider receiving that message and sending a reply, nor any of the routers receiving the reply and updating their routing tables based on that received reply.

In the Duggi provisional patent application, Duggi merely proposes a new router being sent a message from a source. This only occurs when the new router is first added to a routing table. (Duggi Provisional, at ¶ 2.). Further, it only occurs so a source will learn of a path to the new router. *Id.*

The source is not sending any service request to that router. In fact, the source is not a service requester device. Nor is the new router a service provider as required by the pending claims. To the contrary, the new router is merely a node permitting access to any of a number of possible service providers. The source disclosed by Duggi may not even be such a service provider. For instance, Duggi never discloses who the source is supposed to be or what the source is in the provisional application. Such a scant disclosure is unable to teach or suggest any of the limitations of the pending claims, let alone teach "all necessary steps of the invention" as contended by the Examiner. (Examiner's Answer at 21).

Duggi's published U.S. patent application includes four drawings and over fifty paragraphs of text. The one or two paragraphs of the Duggi provisional application did not disclose his entire invention referenced and described in the published U.S. application nor applicants' claimed invention as contended by the Examiner. Indeed, Duggi's disclosure in the provisional application fails to provide any disclosure of any service provider or service requester communicating to each other via a plurality of routers. Duggi's provisional application merely discloses a new router communicating with a source only once, when it is newly added to

a routing table via a number of routers already a part of a routing table. (Duggi Provisional Application, at ¶ 2).

## **II. Elizabeth et al. Teaches Away From The Claims**

The Examiner contends that page 48 of Elizabeth et al. discloses an updating of routing tables. To the contrary, other portions of this same reference teach that routing tables should not be updated. For instance, at page 47 Elizabeth et al. teach that routing tables are only updated in view of "full dump" or "incremental packets" relayed between routers (page 47 of Elizabeth et al.) or via hello messages (page 49 of Elizabeth et al.). Moreover, at page 48, Elizabeth et al. say that "nodes that are not on a selected path do not maintain routing information or participate in routing table exchanges."

The entire reference must be considered when viewing a cited reference; it is impermissible to disregard other teachings of a reference the Examiner is relying upon. *See* MPEP § 2141.02, Part VI. Viewed in its entirety, the Elizabeth et al. reference clearly teaches away from the pending claims.

### **A. It Is Impermissible To Combine Elizabeth et al. With Duggi**

Even if Duggi is improperly applied to the claims of the present application, it is impermissible to combine Duggi with a reference that explicitly teaches away from routers each maintaining their own routing table upon receipt of any route request messages as done by Elizabeth et al. "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP § 2143.01.

Here, the Examiner is combining one reference that teaches that routing tables should not update routing tables upon receipt of a route request message or maintain routing information for

unrelated routes with another reference (Duggi) that teaches that nodes should know the IP address of all the other nodes in a network and maintain the routing information for all the nodes. This is improper. In view of the conflicting teachings made in these references they cannot be combined to reject the pending claims as done in the Office Action.

### **III. Claim 26 Is Independently Allowable**

In the Examiner's Answer, the Examiner contends that page 48, of Elizabeth et al. teaches an indicator that a service discovery request message include an indicator indicating to the routers that the routers should add routing information pertaining to the received service discovery request message to the routing tables of the routers. To the contrary, Elizabeth et al. do not teach or suggest such an indicator in a service discovery request message.

Page 48 of Elizabeth et al. merely say that a router is configured to update its routing table upon receive of a RREQ message by adding the address of the neighbor from which it received the first copy of this message. There is no teaching or suggesting of any indicator being in the RREQ message.

### **IV. Claims 37-38 Are Independently Allowable**

The Examiner contends that Elizabeth et al. teach or suggest a discovery request from a service requestor device that does not know a service provider's source address. To the contrary, Elizabeth et al. merely discloses a router attempting to find a new route to a known destination. For instance, at page 48 Elizabeth et al. say that a "source node desires to send a message to some destination node and does not already have a valid route to that destination, it initiates a path discovery process." The source node has the destination address, just not a known route on which to transmit data to that address.

Duggi's U.S. published patent application also teaches that all IP addresses are known by the routers. For instance, as stated in paragraph 37 of the Duggi published patent application, "Each one of the MANET nodes 101-106 is aware of the Internet Protocol (IP) addresses of all of the MANET nodes 101-106 and is capable of directly communicating with other ones of MANET nodes 101-106 via individual radio frequency (RF) links (or hops)."

None of the cited art alone or in any combination teach or suggest the limitations of claims 37 and 38. These claims are allowable over the cited art.

**V. None Of The Cited Art Teaches Or Suggests A Service Requestor Device Or Service Provider Device As Required By The Pending Claims**

Duggi and Elizabeth et al. are directed to routers. The Duggi provisional patent application is directed to the updating of a router table with a new router. The Elizabeth et al. reference is directed to routers learning new paths to other routers. None of the cited art teaches or suggests a service requestor device communicating to a service provider device via a plurality of routers as required by the pending claims.

The Specification identifies a service provider device as a device that provides a service, such as a server. (*See* Specification, Abstract). The service discovery request is a user operated device, such as a client. (*See* Specification, Abstract). The Examiner appears to have construed the limitations "routers", "service requestor device" and "service provider device" as being the same type of device, routers. However, these terms use different terminology.

Further, none of the cited art teaches or suggests any device seeking a service from a service provider device. For instance, the Duggi provisional is merely directed to a source seeking the IP address of a new router added to a routing table. Elizabeth et al. is merely directed to a router learning a new path to a destination. There is no teaching or suggesting of any service requester device nor any service provider device. Nor is there any teaching or

suggesting of a service discovery request message or reply to such a message as required by the pending claims in the cited art.

The cited art fails to teach or suggest all the limitations of the pending claims.

### **CONCLUSION**

For at least the above reasons, reversal of the rejection of claims 19-38 and allowance of these claims are respectfully requested.

Respectfully submitted,

Dated May 24, 2011

/Ralph G. Fischer/

Ralph G. Fischer

Registration No. 55,179

BUCHANAN INGERSOLL & ROONEY PC

One Oxford Centre

301 Grant Street, 20th Floor

Pittsburgh, PA 15219-1410

(412) 392-2121

Attorney for Applicants